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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,210	02/13/2004	Christopher R. Cording	0124-122	2489

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ROTHWELL, FIGG, ERNST & MANBECK, P.C.  
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SUITE 800  
WASHINGTON, DC 20005

EXAMINER
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GILBERT, WILLIAM V

ART UNIT	PAPER NUMBER
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3635

NOTIFICATION DATE	DELIVERY MODE
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08/18/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/777,210	<b>Applicant(s)</b> CORDING, CHRISTOPHER R.	
	<b>Examiner</b> WILLIAM V. GILBERT	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-147 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-147 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

This is a first action following a Request for Continued Examination.

- Claims 4, 22, 29, 43, 75 and 86 have been cancelled.
- Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-147 are pending and examined.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 June 2010 has been entered.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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**Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-147** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added material is to the effect that the sealant assembly is a **non-metal** sealant assembly (e.g., claim 1, line 22, 23.) This limitation has not been previously provided in the disclosure and is considered new matter. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for

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establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 104-107, 114, 115 and 142-144** are rejected under 35 U.S.C. 103(a) as being unpatentable over Heaney (U.S. Patent No. 4,477,129) in view of Misonou (U.S. Patent No. 6,830,791)

Claims 104: Heaney discloses a door having inner, outer and middle sheets of glass (Fig. 7: 70, 70', 70''), first and second sealants (Fig. 7, the seals are between the glass sheets) and a frame (see Fig. 7, generally). Heaney discloses a coating (75), which may be placed on virtually any of the panels (Col. 8, lines 34-40). Heaney does not disclose the emissivity coating. Misonou discloses a glass panel system with an emissivity coating (Col. 4, lines 46-50). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use emissive coatings in order to aid in the reduction of heat transfer through the glass sheets. It is well known in the art that coatings such as this aid in the reduction of heat transfer through glass. Next, the prior art of record

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does not disclose the U-value or the temperature standards as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have this limitation because optimization of a particular feature of an invention will not support patentability of subject matter encompassed by the prior art unless there is evidence indicating such a limitation is critical. See M.P.E.P. §2144.05 "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454 (CCPA 1955) (Claimed process which was performed at a temperature between 40C and 80C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100C and an acid concentration 10%.) To design a product to conform to standards, such as required by the United States, would be well within the level of skill in the art so that the apparatus could actually be used. If an apparatus does not conform to the required governing standards, then one could not sell and market the invention. Last, to have the sealant assembly as a non-metal assembly would be well within the level of skill in the art based on the desirability of the function of the sealant.

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Claim 105: the prior art of record (Heaney Fig. 7) discloses a second sealant assembly and a third sheet of glass which form the insulating glass unit. See rejection of claims 104 above.

Claim 106: the prior art of record discloses a low emissive material for coating the sheets of glass (Misonou Col. 4, lines 45-50).

Claim 107, 114, 115: while the prior art of record does not disclose the temperatures and humidity as claimed, it would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have the limitations because one of ordinary skill in the art can set the climate control of a refrigerator and building and the prior art of record is capable of not forming condensation.

Claims 142-144: While the prior art does not state the specifics of the sealant assembly, the examiner takes Official notice that these materials are well known in the art for providing proper seals.

***Allowable Subject Matter***

2. Claims **1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-103, 108-113, 116-141 and 145-147** would be allowable if rewritten or

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amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

### ***Response to Arguments***

3. Applicant's arguments with respect to the claims have been considered but are moot in view of reconsideration of the prior art presented. **Applicant is respectfully advised and encouraged to contact the examiner to discuss amendments to place the case in condition for allowance.**

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM V. GILBERT whose telephone number is (571)272-9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William V Gilbert/  
Examiner, Art Unit 3635